

Testing Flexible Cellular Materials (Foam)



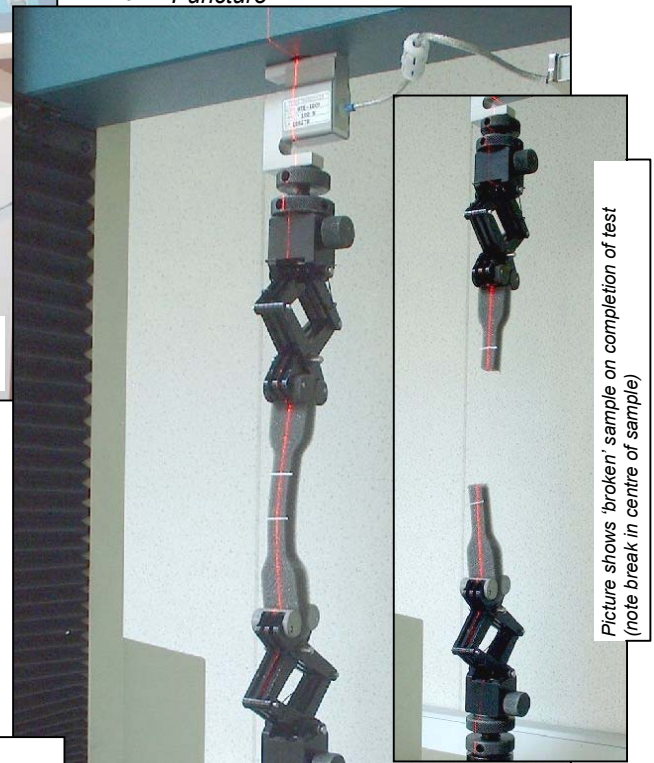
Using Tinius Olsen's Windows Software further enhances testing capability and ease

Compression Testing of foam
(Picture shows $\varnothing 200\text{mm}$ lockable top platen and breathable base platen 400mm^2 on twin column Tinius Olsen UTM)

Using a single Tinius Olsen testing machine it is possible to test flexible cellular materials (foams) in many different ways. The method of holding the test specimens and performing the test is normally defined by the national, international or even user's own 'test method'. Tinius Olsen has supplied systems in accordance with most national and International standards in the past.

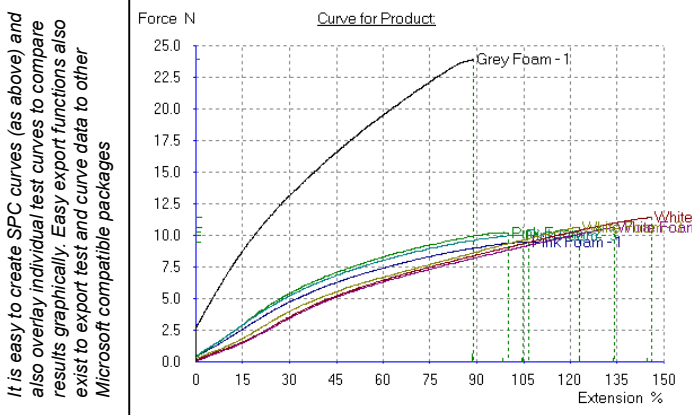
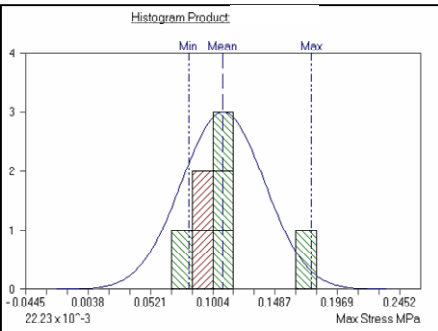
Typical tests might include;

- Tensile Strength & Elongation
- Compression & Indentation Tests
- Tear Tests
- Flexure Test (Bending Modulus/Stiffness)
- Puncture



Picture shows 'broken' sample on completion of test (note break in centre of sample)

Tensile Testing using HT22 scissor action self tightening grips with laser extensometer
Note: For open cell structure '100R' is preferred extensometer model due to reduced adhesion of reflective gauge marker on large pore structures



It is easy to create SPC curves (as above) and also overlay individual test curves to compare results graphically. Easy export functions also exist to export test and curve data to other Microsoft compatible packages

Test Standards include:

- ASTM 3574
- BS EN 826
- BS 4443
- DIN 53571
- DIN 53455
- (replaced by ISO527)
- DIN 53575
- DIN 53576
- DIN 53577
- ISO